

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (currently amended) ~~[[A]]~~ An isolated biopolymer marker ~~comprising the sequence SEQ ID NO:1. or an analyte thereof useful in indicating at least one particular disease state~~ peptide consisting of SEQ ID NO:1 diagnostic for Alzheimer's disease.

Claims 2-38. (cancelled)

Claim 39. (new) A method for diagnosing Alzheimer's disease comprising:

- (a) obtaining a sample from a patient;
- (b) conducting mass spectrometric analysis on said sample in a manner effective to maximize elucidation of discernible peptide fragments contained therein; and
- (c) comparing mass spectrum profiles of a peptide consisting of SEQ ID NO:1 to mass spectrum profiles of peptides elucidated from said sample; wherein recognition of a mass spectrum profile

in the sample displaying the characteristic profile of the mass spectrum profile for the peptide consisting of SEQ ID NO:1 is diagnostic for Alzheimer's disease.

Claim 40. (new) The method of claim 39, wherein said sample is an unfractionated body fluid or a tissue sample.

Claim 41. (new) The method of claim 39, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 42. (new) The method of claim 39, wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Maldi Qq TOF, MS/MS, TOF/TOF, ESI-Q-TOF and ION-Trap.

Claim 43. (new) The method of claim 39, wherein said patient is a human.

Claim 44. (new) An Alzheimer's disease diagnostic kit comprising: (a) a peptide consisting of SEQ ID NO:1, and (b) an antibody that binds to said peptide in a sample from a patient.

Claim 45. (new) The diagnostic kit of claim 44, wherein said antibody is immobilized on a solid support.

Claim 46. (new) The diagnostic kit of claim 44, wherein said antibody is labeled.

**Restriction Requirement**

Restriction to one of the following inventions has been required under 35 USC 121:

Group I. Claims 1-2 drawn to a biopolymer marker peptide, classified, for example, in class 530, subclass 300.

Group II. Claims 3-9 drawn to a method for evidencing and categorizing disease, classified, for example in class 435, subclass 7.1.

Group III. Claims 10-32 in part drawn to a diagnostic kit to the extent of a binding molecule, classified, for example in class 536, subclass 23.1.

Group IV. Claims 18-32 in part drawn to a diagnostic kit to the extent of a biopolymer marker peptide, classified, for example, in class 530, subclass 300.

Group V. Claims 33-37 drawn to a process for identifying therapeutics, classified, for example, in class 435, subclass 6.

Group VI. Claim 38 drawn to a process for regulating a disease state, classified, for example, in class 424, subclass 130.1.